MINUTES

(Subject to the Approval of the Committee)

ENERGY, ENVIRONMENT & TECHNOLOGY INTERIM COMMITTEE

Tuesday, November 18, 2008
Capitol Annex, Room 208, Boise, Idaho

The Energy, Environment & Technology Interim Committee was called to order by **Co-chairman George Eskridge** at 9:30 a.m. on Tuesday, November 18, 2008. Members present were Senators: Co-chairman Curt McKenzie, Patti Anne Lodge, Mike Jorgenson, Russ Fulcher, Kate Kelly, and Elliott Werk, and Representatives: Co-chairman George Eskridge, Maxine Bell, Eric Anderson, Bert Stevenson, Bob Nonini, Elaine Smith, and Ad Hoc member Wendy Jaquet. Those absent and excused were Representative Ken Andrus and Ad Hoc member Representative Mark Snodgrass. Legislative Services staff present were Mike Nugent and Twyla Melton.

Others present were Andrea Shipley, Snake River Alliance; Jennifer Woodstrom, Institute for Energy & Research; Dr. Ralph Bennett, Idaho National Lab (INL); Randy Lobb and Ron Law, Idaho Public Utilities Commission (IPUC); Arjun Makhijani, Roy Eiguren, James Carkulis, and Holli High, Exergy Development Group (XRG); John Ireland, Idaho Department of Commerce; Mike Gallup and Jeff Burns, Renewable Energy Resources; Joie McGarvin, Westerberg & Assoc.; Brad Purdy, Community Action Partnership Assoc. of Idaho; Phil Hardy, Senate Caucus Leadership; Teri Ottens, Community Action Agency Partnership of Idaho (CAPAI); Mike Brassey, Idaho Power Co.; Beth Markley, Idaho Council on Industry and the Environment; Brenda Tominaga, Idaho Irrigation Pumpers Association (IIPA); John J. Williams, Bonneville Power Association (BPA); Mark Snider, United Water of Idaho; Russ Hendricks, Farm Bureau; Dan Olbendorf, Idaho Grain Producers; Neil Colwell, Avista Corporation; Mike Louis and Lisa Wennstrom, CAES/EPI; Mark Bathrick, BSU/EPI; Ron Williams, ICUA; Benjamin Davenport, Evans Keane; Rick Rayhill, Ridgeline Energy; Lynn Tominaga, IGWA; Paul Kjellander, Idaho Office of Energy Resources and Katharine Gerrity, Legislative Services Office.

NOTE: All copies of presentations, reference materials, and handouts will be on file at the Legislative Services Office (LSO).

Co-chairman Eskridge called for a motion on the minutes from September 17th and 18th, 2008. Representative Jaquet moved to accept the minutes as written with several changes, i.e. head turbines to wind turbines. Co-chairman McKenzie seconded the motion. The motion carried by unanimous voice vote.

Co-chairman Eskridge asked for introductions from the Interim Committee and the guests attending the meeting.

Dr. Arjun Mahijani, The Institute for Energy and Environmental Research and Dr. Ralph Bennett, Idaho National Laboratory (INL)

Dr. Bennett opened the presentation giving some background on the INL, why they work in this arena, and why they make appearances such as this. There is a concern with nuclear energy and the final portion of this presentation will address those challenges and issues. The INL does not have or take a position on the plant projects proposed for Idaho; that is not their domain. INL works and follows the current industry preparations for building new plants because they are trying to define the research and development potentially needed. INL works on the newly emerging white water reactor sustainability program, fuel recycle initiative, global nuclear energy partnership, and the next generation nuclear plants. These are all programs defined in the Department of Energy. INL participates very broadly in industry, government, and academic activities.

Looking at the outlook for the nuclear renaissance in the United States, there are currently 23 applications for a total of 34 units before the Nuclear Regulatory Commission (NRC), these are all in the southeast, south or the east where population is growing and more electricity is demanded. Applications for Idaho and Utah have been announced but have not been submitted yet. Most applicants will use the "Part 52 one step licensing" plan - a new plant will take about eight years to come on line, four years for licensing and four years for construction. There are three actions in the process: 1)design certification that settles questions about plant design and its accident behavior; 2)early site permitting settles questions about suitability of a site for a generic plant; and 3)construction and operating licensing which focuses on the specific questions about the plant to assure that the plant is built according to specifications.

Two plants in the U.S., one in Georgia and the other in South Carolina, have signed engineering and procurement construction contracts which is a big step in the decision to build a plant. The Florida plant has received permission from the Public Utilities (PUC) to begin charging expenses for that plant to the rate payers. Merchant plants are being proposed. That is where the investor in the merchant plant will bear the risk – only 1/6 (17) of the 104 nuclear plants today are operated as merchant plants and quite satisfactorily. The benefits of the operating plants have been studied extensively and generally offer jobs, payroll, and property tax to counties, plus income tax and indirect taxes but generally not sales taxes.

There are challenges and issues that may be important to Idaho as they go forward. There is good news in one area, the only forging works in the world, Japan Steel Works, is available to make pressure tests on grids and other heavy forged items. There have been some changes in this area; nine companies have announced plans to enter that business in some capacity in six different countries including two locations in the U.S. Each of those projects will need from 3-10 years to bring that capability on line. Water needed for cooling is an issue in virtually every nuclear plant in the U.S. according to experts. Early site permits are based on hybrid cooling: 1/3 dry cooling and 2/3 water. Total use of dry cooling uses less than 1/10 of the water and that technology is the area the INL really pushes hard to move forward. Dry cooling is more expensive and that is a barrier.

The president has extreme latitude in naming members of the NRC and INL's chairman and that may change the direction we are going. Meanwhile, onsite storage of nuclear secondary fuel at the plant sites is becoming very common place and very accepted. It will probably continue as a practice since some say it is good for at least 50 years and some say as much as 100 years.

Capital cost is the biggest challenge for new nuclear builds and that is driven by rapid escalation of materials and construction costs which have been rising at 10-20 percent annually since 2004. This is due to the heavy demand in more rapidly developing countries such as China and India. The industry doesn't publish comprehensive data on plant cost projections or contract negotiations. Recent studies on this issue reflect these rapidly escalating plant costs. It is important to note that this escalation covers all forms of energy. Loan guarantees were first authorized by the Energy Policy Act in 2005 and can potentially reduce the cost of electricity for a nuclear plant by about one-third. Currently there is $18.5 billion available for loan guarantees for nuclear plant construction but that would only cover 4-5 plants.

Idaho will benefit from the experience gained by the plants that are going forward in the south and east. They will prove out the financing, the cost, the schedules, the licensing and the permitting. They will also identify the need for manufacturing and work forces.

Dr. Makhijani continued with the presentation (on file at LSO) and referred to a speech made by **David Freeman** two years ago that he found a little shocking. He said we should get rid of nuclear, oil, coal and go solar. **Dr. Makhijani's** first reaction was that every industry would go to China. Not thinking fossil fuels could really be phased out, he decided to take a look and received financing to do so resulting in his book, *Carbon-Free and Nuclear-Free: A Road Map for U. S. Energy Policy*.

What about the French? The French decided to go nuclear in 1973. They had a larger problem with oil that the U.S. at that time. A positive lesson to learn is if you make a determined policy decision to transform the electricity sector, it can be done in 25 years. The French eliminated nearly all oil and replaced it with electricity but they import all of the uranium so they did not achieve the total independence they sought. The French recyle <1% of the spent fuel, the spent plutonium fuel builds up and there is no repository, nor do they want one, so they discharge about 100,000,000 gallons of radioactive waste into the English Channel every year and have polluted the oceans to the point that 12-15 Western European governments have told them to stop but the French ignore them. Great Britain is polluting the Irish Sea and Luxembourg has no coastline so 99% of the waste is piling up. They spend 2-3 cents more per kilowatt hour than the U. S. and they can do that because of taxpayer and government subsidies.

Another point, the Wall Street that considers sub-prime mortgages to be secure does not like nuclear power; it is too risky. One of the problematic things with nuclear power is who can see what the demand is going to be, how much efficiency there will be. Whatever you seek to do, it is most prudent to seek to do it within 3-4 years. All pipeline costs are going up except solar. Putting all considerations aside, nuclear energy is a sub-prime energy situation and will end up

costing more. Efficiency with local and state level standards is the better source of energy conservation both for commercial and residential buildings. There is plenty of wind and solar energy available.

Dr. Makhijani said that when the wind doesn't blow and the sun doesn't shine, first wind and solar must be coordinated, very often the wind is at night and the sun is in the daytime. Reduce the reserve requirements, use the hydro when the wind is not blowing and the sun isn't shining. Use natural gas for the power plant when the wind is not blowing. Denmark has 20% wind, the U.S. has 1%. Denmark has basically hydro with natural gas as backup for their system. In the case of Idaho Power, hydro would work. The idea is to store heat. Ice energy is another process for cooling that works effectively to relieve power demands during peak times. The ice machine makes ice at night to be used during the day. If efficiency is used as the foundation, all new energy sources are going to be more expensive than the ones that are used today. However, the total energy production should come down and the overall electricity and energy bills as a proportion of the economy should remain about the same. If efficiency is not given attention, we will face tough times paying for energy.

Dr. Makhijani recommends two things: 1) transform the building sector to include energy efficiencies, and 2) use low interest loans from federal, state and local governments earmarked for efficiency and renewables.

Representative Jaquet requested the list of categories we could gain from other's experiences. **Dr. Makhijani** responded: "financing, cost, scheduling, licensing, and permitting." Work force and industrial infrastructure were mentioned but were not of the same importance as the first five items. The first plant will illuminate a lot because Part 52 has never been successfully exercised so testing that 15 year-old regulation has a lot of uncertainties.

Representative Stevenson asked about the status of the Argon reactors. **Dr. Makhijani** stated it had been halted in 1994. The approach at Argon was to produce energy via coal and attempted to reduce the storage of plutonium. It had real merits but it was halted under a Department of Energy (DOE) restriction. **Representative Stevenson** inquired about the French breeder reactor program. **Dr. Makhijani** responded that breeders have been a dream of reactor design because it converts the main uranium resource into plutonium so 99% of the natural resource is reusable. The history of breeders is spotty; some are successful, others not so much. They are also much more expensive that the current reactor.

Representative Jaquet requested more information on the discharge to the English Channel and the Irish Sea, asking why is it continued. **Dr. Makhijani** said he didn't have all the answers to that question. One of the sources of information is from their own annual reports. It is a large chemical plant and purex separates plutonium and uranium; liquid waste is generated. This happens in the U.S. as well. The French do not regulate these discharges based on the grounds that they are not waste; they are liquid discharges, and the health effects are minimal. People are upset, but it is not really regulated.

Co-chairman Eskridge asked how that problem equates with the U.S. nuclear concerns**. Dr. Makhijani** said it is a technology-dependent issue. If the purex process is used, there will be liquid waste. The processing associated with an integral class reactor would probably not have a large volume of liquid discharge. **Co-chairman Eskridge** said we would not use that process in the U.S., asking if this is an insurmountable problem in dealing with waste. **Dr. Bennett** answered that it presents a very rich research development agenda. If the regulatory regime of the U.S. is adhered to, those practices are not an option. This is all very far off. The Research Institute will have a long-term strategy coming out in about a month and they have been looking at fast reactors that will be available about the end of the century. A collection of different experiences will be accumulated by that time. It will take 100 reactor years and then a long 30 year demonstration program. There would be a small fleet of reactors that would go for decades and society needs to turn to that kind of prospect. The research and progress needed to successfully and slowly bring the technology for very high uranium utilization into the U. S. will take at least 50 years or longer before the economics are ready, before the technology is ready and especially what will translate into the U.S. experience in the next few years.

Co-chairman Eskridge commented that this discussion was just about utilizing spent fuel. **Dr. Bennett** responded that it was broader than that. The broad industry has a more seasoned view of the spent fuel which will essentially remain on-site for decades until it is either really disposed of in a depository of some sort or it has a greater value in reprocessing. There are many choices on how to close a fuel cycle.

Senator Werk restated that the French do not have their own nuclear fuel, they have to import it. He asked where would fuel come from for the U.S. if there was a nuclear industry here. **Dr. Makhijani** explained that the U.S. uranium ores are low grade, the richest ores are in other countries such as Canada and Australia. Ninety percent of the uranium fuel for the existing fleet of 104 reactors comes from the weapons surplus in Russia. Once that is gone, it will have to be imported from new mining. **Dr. Bennett** added that the amount of uranium currently in the U.S. is about 7% of the world uranium, Canada and Australia and the three countries have about 40% of the uranium today. Overall, there is a lot of uranium in friendly countries and the worldwide fleet uses about 1/10 of that supply,so there is tremendous pressure not to bother with recycling.

Senator Werk was hearing that the difficulties with nuclear power was associated with the cost to build a plant and the translated cost of kwh because of its competitiveness and also the issue of how to handle the waste. "Do you agree or disagree on those issues?" "Do we have a problem with costs?" "Do we have a problem with storage?" **Dr. Bennett** stated that they are more in agreement than disagreement. Highlights of disagreement:

> Concerned about rising costs but there is not good information or proof until plants start getting built. The plants probably will be built because of loan guarantees, production tax credits, and other things that have been offered. Those will prove out when the first six plants are built. Realistically, recycling is not viable for decades to come.

Dr. Makhijani confirmed agreement. These cost numbers come from the industry. Comments:

> The plants were built in Korea before the costs escalated. Now the cost escalations have

been added for all forms of energy. The differences are what is done with nuclear today, laying all factors aside, it is risky. Looking ten years ahead, it is believed that the cost of solar will come down dramatically within five years and, if the investment is in a ten- year time line in a capital intensive project, that might result in a cost of 13 cents per kwh where the competitor is 9-10 cents per kwh. Cost and lead time is a very big risk. Worldwide, $100 billion has been put into research and another $100 billion would go into development and with the variety of choices, the determination must be made where to spend the money, where is the payoff, where should research and development be done.

Dr. Bennett pointed out that the stakes are very high. With a fast reactor economy, it will get 50-70 times more energy out of the same amount of uranium, so it might be worth considering to spend a few hundred billion to get that. Today, the statistic is about $50 billion that has been spent on nuclear industry research and development to bring the reactors up to date, and now produces an electric industry somewhat in excess of $50 billion of electricity per year. **Co-chairman Eskridge** referred to the Washington Public Power Supply experience and going back to costs. He said that they designed the plant and got ready for construction, but there were continuous change orders which destroyed that resource. It was mentioned in earlier discussion that it was getting to the stage where the design is approved; is that guaranteed in that the design for one particular facility will stay in place and there will be some regulatory action that will contain those costs and keep the change orders under control. **Dr. Bennett** stated that at the point of design certification, they try to settle all the issues before construction begins. **Co-chairman Eskridge** asked if we are going in that direction. **Dr. Bennett** concurred. There is no guarantee that won't happen again, but with the NRC licensing process, it is less likely to happen. **Co-chairman Eskridge** thought we could assume there is some potential for lowering the cost or at least making the cost more certain. **Dr. Bennett** said the cost would be very close to the schedule especially during construction where money is being put out. The industry is keenly aware that shortening the construction schedule would be very beneficial. Modules have been brought forward as a building method to save money. The learning curve will come from other countries that are building projects to reduce the time frame it takes to build. **Dr. Makhijani** agrees and adds that supposedly, there are generic reactor designs already approved, as well as the construction license. In practice, that is not working. The applicants have asked for a large number of design changes and the NRC has said the application is not complete because the changes are not specified because the world has changed since the last reactors were built. This whole set of problems is emerging. Also, the NRC is now proceeding with reactors and considering the construction applications before the design is certified. The construction license could be approved but the reactor might not be approved. It is a scheduling problem.

Representative Anderson asked how much uranium is available with a 20% construction capacity going forward, asking how many years would that provide. **Dr. Bennett** said the world supply of uranium is in the 6-7 million ton range and there are different grades of that supply. Then, 1.0 million tons is being discovered per year. There is a lot of interest so there is a lot of exploration. The world fleet of 439 reactors is only using about 100,000 tons per year that equates to about 70 years and that number appears in the Japanese literature. It depends upon if the amount being

discovered is greater than the amount being used. Easily, there is enough for hundreds of years.

Representative Anderson stated the facts of the difficulty of mining these ores and the funding and technology that would be required to get at that extraction. Nuclear has a lot of viability and when remote resources are discussed, like the earth's center, it would be better if the $200 billion required for research go into a more remote reactor in the center of the earth like what is being done with geothermal. Idaho has the potential with geothermal. "Is INL spending as many dollars on geothermal research that they are on the nuclear side?" **Dr. Bennett** responded "no." A geothermal program was turned down by the DOE. There is still a small active geothermal research crew, but it doesn't rival nuclear research.

Dr. Makhijani interjected that there used to be a geothermal program in Los Alamos started after the first energy crisis, and then was shut down. That kind of program is being proposed again at MIT and this kind of program is very much needed because of the large energy requirements. That resource is especially appropriate for the west and Idaho.

Senator Kelly stated that they had seen charts showing that the percentage of electricity supplied by those currently planned nuclear plants would be only a small percentage of what we would need as a nation. As policy makers, the limited dollars may be better focused on green buildings and other efficiencies and renewables that are more short term. **Dr. Bennett** said fundamentally, he would disagree with that approach. The gas light reactors are soon to be certified and are not requiring a lot of research and development. Plants can be built and go forward without a lot of investment. The question of dwindling electricity is a question that is being explored. If five nuclear plants are built per year, the share will be increased. It is not an impossible research problem to continue nuclear and to even expand it.

Co-chairman McKenzie asked if the current 23 applications are approved and come on line, does that just replace plants that are at the end of the life cycle or will that increase the energy that comes from nuclear but might not increase the overall percentage. **Dr. Bennett** said that is the second most important question that researchers are exploring; can you live through the retirements of the reactors. With the life extensions that have been done and will be completed, retirements will begin in 2030 and all would be retired by 2050. Part of the main thrust put into the water reactors is increasing those life extensions to 80 years, up from 60 years. That would get the retirements to 2070, and it will still be tough to live through. They are looking at about five plants per year at this time that would successfully hold the line.

Senator Werk inquired if the cost per kwh include the decommissioning costs and who is going to pick up those costs for the current fleet of plants. **Dr. Bennett** answered that decommissioning became a hot issue 10-15 years ago with the NRC. The provision is that each plant sets aside a sinking fund to pay for the decommissioning which would be about $400 million and the NRC is carefully monitoring the buildup of those resources to have that money available. **Senator Werk** said that the cost is being included in the calculations for the cost per kwh for both current rates and future costs. **Dr. Bennett** agreed, saying that it is a cost of doing business. **Dr. Makhijani**

said the decommissioning fund is not as big an issue as the spent fuel fund. It is very unclear what the government will require – what happens after the plant is closed down. There are a lot of questions around the whole disposition and management of that.

Co-chairman Eskridge stated that his concern is not being diversified. There is the carbon free environment and in looking at that data, it looks real good, but there is nothing there that provides any certainty that will be accomplished. If there is not a diversified attack on meeting the energy needs, we could decrease the economy significantly. Would each of you address the diversification issue?

Dr. Makhijani responded that he isn't advocating one particular element. Efficiency is the most important, it is not new nor speculative, it is something we know how to do. We have buildings that have been built at costs that have been measured. If we are serious about energy policy, that piece needs to be done first. Anything from the supply side will not be economical without efficiency. The main argument for nuclear is that it is a low carbon energy source we are willing to pay more for. It is financially more risky, takes a very long time to build, and that is very important. The U.S. should set a course for renewable energy.

Dr. Bennett stated that all the non-remitting sources including nuclear have a good future as part of a balanced portfolio needed for the kind of energy security the nation requires. In an environment where global warming is taken seriously, we need to push down the emitting source as rapidly as possible so nuclear would probably become more important as those steps are taken. A positive climate at the International Atomic Energy Agency (IAEA) is in support of legal access to technology, nuclear in the U.S. and the leadership to gain the right regulatory structure, discipline and the real knowledge to do it well. The U.S. needs to be part of all that.

Ms. Teri Ottens, Community Action Partnership Association of Idaho (CAPAI) – Low Income Programs for Energy Assistance

Ms. Ottens explained that the CAPAI is a group of agencies throughout the state that serves the low income population. They were federally chartered about 40 years ago to help the federal government advance federal programs and help states with some of their low income programs. When it comes to energy, they have focused on energy efficiency through the weatherization program (about 200 homes/year) for seniors and low income families. They also look at the energy efficiency funds that help people pay their heating bills if they are in the low income category. Idaho is not able to offer the energy assistance and payment assistance programs because state law says that there can be no discrimination between or within rate classes which means that if a program is offered to a certain income group, that is not allowed; it would have to be offered to everyone in that rate class. This prohibits utility companies, even if they would like to, from offering low income programs. Some years ago, CAPAI was approached by a utility to seek some changes in the law but at that time things were good and nothing was done. However, they are back this year to pursue this issue for several reasons:

-Record rate increases – 10-20% or multi rate increases.
-Downward trend in economy.
-Increased request for help in many areas i.e. food, energy.
-"New Poor" – borderline people who have never had to ask for assistance.
-25% increase in requests for assistance.

Ms. Ottens distributed a handout about public workshops that were held that included the stakeholders that would address these problems with a summary of the topics discussed. (On file at LSO.) Most of the ideas came from surrounding states. At the end of the workshops, the conclusion was that about 50% of the options available cannot happen unless there is a change in the law. A copy of a proposed bill was included with the handout.

When this issue was raised a few years ago, a couple of utilities did not agree with it and their concerns had to do with being forced into offering low income programs that might not be beneficial to the utility or the stakeholder. There are several protections contained in the bill. The way this law is written, it is completely voluntary. It does not contain a product design or any program; that would be up to the utility to determine. The third protection is that whatever the utility decides to propose must go through the PUC process. The bill simply allows a utility to offer a program, if they so desire. It is a time in the economy when these programs will become more and more important as more and more people are unable to pay their utility bills.

Representative Anderson stated that the bill required the utility to go before the PUC. Currently, public power in Idaho is not required to go before the PUC, does this put a burden on the co-ops and municipalities to appear before the PUC. **Ms. Ottens** replied that they don't have to go before the PUC. They are currently allowed to do these types of programs. This basically applies to the four main utilities: Idaho Power, Avista, Intermountain Gas and Pacific Corp. **Representative Anderson** wanted confirmation that the utilities have no capability to voluntarily participate in low income programs. **Ms. Ottens** concurred and explained that the only low income programs they can participate in right now are for energy efficiency but energy affordability programs cannot be offered.

Representative Nonini asked if the utilities that participated in the workshops say that those rate payers who did not get any assistance would pay higher rates and if so, how would that be done. **Ms. Ottens** stated that the program had to be paid for somehow and that would be up to the utility when it was proposed to the PUC. There are several ways this can be paid for, i.e. residential versus commercial/industrial or out of profits, costing the average rate payer about 12 cents per month on their utility bill. **Representative Nonini** requested **Neil Colwell** to yield to a question: "What does Project Share generate for Avista in North Idaho as far as helping low income people?" **Neil Colwell**, Avista Corp., could not answer that question offhand, but did comment that they do get good response from customers and from shareholders profits for corporations. In general, they are supportive. Other customers are already paying for uncollectibles for low income customers that can't pay their bills. When they go for a rate increase, they have the uncollectible account of $1-2 million per year that ends up being written off. Going to the PUC would make it

more obvious. The customers in Washington pays a surcharge that relates to about .02 of 1% and that allows more active management of the low income group having difficulties. It makes sense to have a mechanism where a utility can establish a program.

Co-chairman Eskridge inquired if the uncollectibles were in the rate base or came out of the shareholders' pockets. **Mr. Colwell** responded that it was in the rate base and they have to justify it to the PUC. The shareholders do contribute about $350,000. **Co-chairman Eskridge** wanted to know if there was an estimate on how much of the uncollectible amount would be avoided by this type of policy. **Mr. Colwell** said the accountants tell him it is very difficult to track. **Ms. Ottens** expanded on the question, saying that in addition to the uncollectibles, there is the cost of shutting off, turning back on, negotiating with the customer, there being a lot of cost involved. CAPAI has studies from other utilities that show it is almost a 1-1 benefit between the cost of the program and the cost to avoid ,when people don't pay their bills. The utility would have to look at all of these issues to determine if they wanted to do a program or not. Right now they don't have an option.

Representative Jaquet asked if the federal funds for LIHEEP been increased this year. **Mr. Ottens** stated that they are talking about increasing from $13 million to $25 million for Idaho but they haven't seen any money yet. It is in the budget, but they say don't count on it until a check is received. They served about 32,000 Idaho families last year and about 76,000 are eligible. **Representative Jaquet** commented that when the PUC talked to their conference in McCall about the IRPs, the gentleman from Avista asked for this piece of legislation.

Representative Stevenson wondered if the reference to the authority of the proposed statute was necessary in this legislation. Does that put a cap on the program? **Brad Purdy**, attorney, who drafted the bill said that this figure was picked because it is a common threshold for a number of social programs. The bill follows what Washington state has done because it was a good template for what CAPAI wanted to achieve. What the utility proposes is entirely up to it. Would it be constrained by a cap? It could be, if it is in the statute. **Representative Stevenson** said that is a concern. When it is in statute, if the federal government increases it, it automatically increases for the state. This may require the utility to go that high even if they didn't want to.

Representative Bell stated that this law has been interpreted to constitute discrimination in a rate class. "What happens to that law when it has been interpreted that the law is needed?" **Ms. Ottens** responded that this exempts low income folks and still keeps the language in the law about discrimination. The $3 million received from JFAC fell into the same program category as the federal law and didn't come under the purview of this law. The state could develop and fund a mini LIHEEP program, which is another option, but would certainly require gift legislation to do that and open it up to the utility to implement programs statewide. **Representative Bell** concluded that changing that will not be interpreted as discrimination in a rate class if there is just that one exemption for low income. **Senator McKenzie** said that the code section says there can't be preference and this would be discrimination in a rate class, but we are saying that we are accepting this program to allow that.

Senator Jorgenson directed this question to **Mr. Colwell**. The question assumes that you can't take a power bill as a deductible item off your taxes. "Is participation in a share program considered a charitable act or deductible act?" **Mr. Colwell** stated that a contribution to Project Share constitutes a deductible, charitable contribution.

Senator Werk wanted clarification in reference to the 150%. Ratepayers pay the bill any way you look at it, uncollectible or program ; we pay for it. Anywhere the percentage is set, the same laws apply, and the ratepayer pays for it. **Ms. Ottens** agreed that the ratepayers pay.

Co-chairman Eskridge said that in the case of uncollectibles, the utility has the right to disconnect them. That relieves the burden on the ratepayer. The threat of disconnection is some incentive for a person to pay their bill who may otherwise not pay it. **Ms. Ottens** concurred. If the utility sees this as a benefit, they can explore it, present it, and get it set up.

Co-chairman Eskridge raised the question of the utility not being forced. There may be no force by law but there is by politics because if the utility doesn't do this, they are the bad guy. **Ms. Ottens** said that is correct. There may be public pressure to implement a program other utilities are doing. They deal with that now with various programs.

Co-chairman Eskridge stated that he has a problem with adding this to the rate base. This is a society problem not a ratepayer problem. There is an issue with the ratepayer picking up the cost of a program that belongs to society that should be paid for with taxes. This is a philosophical problem. **Ms. Ottens** responded the point is well taken. That is why they have the federal LIHEEP program that uses public taxpayer dollars. The fact that the ratepayers are paying for this program goes back to the language in the bill that they will have a say in whether or not they want to do that. It is a utility company that will have to justify it to their ratepayers and also to the IPUC. The ratepayers pay either through taxes or through rates. Idaho is the only state with neither the option of allowing the utilities to address the problem or the option of the state addressing the problem through taxpayer money. There is no philosophical response to whether it is a social problem or ratepayer problem, it is both and one way or another the citizens will pay.

Representative Anderson said that what he found in their public power utility is oftentimes on their write-off list; those who are having the most difficult times are not living in their own homes but are renters. Their bills are higher per month than anyone else. There is a landlord situation where there are no incentives to meet the efficiency standards of their units because the power is in the tenants' name, so a whole other class of people is benefitting who has no incentive whatsoever to make the improvements that they should. He is not opposed to this, but there are some things that need to be thought through. **Ms. Ottens** stated that what is found is that low income, whether they own their own homes or rent, tend to live in older housing that is not energy efficient. The weatherization program is open to renters and the goal is to try and get these homes to be energy efficient so the problem is solved for a lifetime. The funds for weatherization are limited. In the last three years, about 4.5% of the eligible homes were weatherized. Out of the 32,000 asking for LIHEEP assistance, they have been able to do 1,300 homes. **Representative Anderson** followed

up saying timing is always an issue and looking at the power plan, there are relative big increases for those people; the potential could be 100%. This is all voluntary, but there are a lot of variables included, and this is a difficult time to bring this forward. **Ms. Ottens** responded that was what they were told when times were good. When is a good time to bring this forward. The utilities do have cost oversight and if it is up to them, they are not going to do programs that will harm their customer base.

Co-chairman Eskridge asked what exactly was the Committee being asked to do. **Ms. Ottens** said they are not after any action today, just providing information. **Chairman Eskridge** stated that he is not sure he is opposed, but he is not sure he is supportive either. He wants to talk to others involved before he comes to any conclusions.

Mr. Colwell reported some additional information on Project Share in response to the question about how much money is generated in northern Idaho for Project Share customers. We received $63,000 for calendar year 2007. The company contributed $50,000 in addition to that. Idaho customers were recipients of $174,000. The difference in the amount coming in and the amount paid out is due to a combined program with Washington and a certain percentage of that is allocated to Idaho. Companywide, $215,000 is contributed to Project Share.

Discussion of new customer load by public utilities - Representative Bert Stevenson and Randy Lobb, Idaho Public Utilities Commission (IPUC)

Representative Stevenson introduced the subject by offering a draft bill where "the commission may establish reasonable non-recurring charges for new customers to partially recover the costs of public utility capital investment in new facilities to serve new customer growth."

Senator Werk requested a quick refresher of the proposal. **Representative Stevenson** explained that the utility would initiate the request and the IPUC would act on it. The purpose is to provide a way to allocate at least a part of the cost of new growth to the new growth area.

Co-chairman McKenzie asked procedurally, how would this process be initiated and go into effect. **Mr. Lobb** responded that the IPUC sometimes initiates a case on its own such as a line extension fee or a request by the company to rate base a new plant. If the IPUC believes there is a need to address such an issue, then they would move on their own accord.

Representative Jaquet stated that they have discussed this more than once and asked if it is appropriate that the Committee endorse this bill and ask the IPUC to bring it before the appropriate committee or do we just take it under advisement. **Representative Stevenson** said there was a motion the last time that it would go to the germane committee for action. **Representative Jaquet** found the motion in the September 17 minutes and read those minutes showing the motion passed. The motion specified the Energy, Environment and Technology Committee for a full hearing. **Mr. Colwell** had no further comments but would yield to questions.

Co-chairman Eskridge remarked that this appears to be counter to basic rate philosophy. In the past when new customers came on, everyone got the benefit of that growth and paid for that new growth. This is opposite, it is saying new customers have to pay for growth. "Is that counter to basic rate law?" **Mr. Lobb** answered that it is a different approach. This would give the IPUC the option to consider non-recurring charges for new customers. Traditionally, all costs were averaged together and everyone paid the same amount no matter when they came on the system. In answer to the question, there is no such thing as old customer, new customer. **Co-chairman Eskridge** followed up saying if we are deviating from that, are we now saying that new capital investment would be applied to new growth and not spread over all and is there a danger of impacting the incentive for growth. **Mr. Lobb** responded that would be one of the issues that would have to be considered before applying a hook-up fee. There are a lot of practical issues like: What is a new customer? What if you just changed homes and were an old customer and became a new customer elsewhere? What if an old plant is rehabilitated? This legislation would allow the IPUC to consider that and implement fees without being contrary to law. **Co-chairman Eskridge** asked how far would you anticipate the IPUC going in this direction. **Mr. Lobb** couldn't speak for the Commissioners. The IPUC staff has had discussions and are concerned about the perception that there is some entitlement to vintage low-cost plants and new customers are not entitled to any of that low cost resource, they have to pay the going price. In deregulated markets, everyone pays the market price; everything is averaged. In Idaho, it is cost based, so low cost and new cost is averaged. How far could we go, or would we be willing to go, or would we be allowed to go in charging a new customer all of the higher costs; all new customers cause costs to increase. What it would take to mitigate that and what impact there might be on growth and economic development in Idaho is hard to say.

Senator Werk stated a lot of issues come to mind. For example, someone could put in five plasma TVs and usage could double and their demand does not fall into the category of a "new customer." The big question is "What is a new customer?" If a new wind plant wants to come on line are they a new customer; does that extend to producers as well as end users. **Mr. Lobb** stated that is a practical application problem that will eventually have to be determined. For the most part, it would be end users and the cleanest way to apply that would be new hook ups, whether it is residential, commercial, or industrial.

Representative Anderson referred to *Section 61-315* where it talks about discrimination being prohibited and also talks about public utilities and going to the addition in the draft to allow the IPUC to do this, that being two different things. Utilities can't do these discriminatory actions, and this is allowing the IPUC to make a determination to allow discrimination. When a developer goes before planning and zoning, he not only has to bring the utility but now will have to bring the IPUC to determine the additional, non-recurring cost of putting in the resource, i.e. a substation. There are many different ways of looking at "non-recurring." If we are looking at *61-315* , we are looking at two changes from previous testimony to this; there is a long way to go.

Representative Stevenson asked the Committee to remember the discussion that **Jim Kempton** had about rate hearings, and the question about increasing rates when all the growth is in the

Treasure Valley. The response to the question is under the current laws; without this change, the IPUC can only do it one way. This will allow the IPUC to put "part of that new growth on new construction, it doesn't say it has to be, it gives the IPUC the opportunity that they may establish to partially recover the costs of the utilities capital investment for new facilities." That is the reasoning behind this legislation. **Representative Anderson** stated that they are talking about what action public utilities cannot do; they cannot take, they cannot grant preference or advantage, so basically, in *61-315*, we are telling the utilities what they can't do, so we are going to grant the IPUC the privilege to make those determinations for them.

Representative Smith proposed that this legislation should not go to the Energy, Environmental and Technology Committee, it should go to State Affairs who deals with all IPUC issues. **Mike Nugent**, LSO, explained that the RS packet will be given to the co-chairs and they can send it wherever they want to. If the Committee tells the co-chairs they want it to go to State Affairs, out of courtesy, they would send it there. There are no rules as to where it must go.

Representative Jaquet stated that it is the Speaker who determines where it goes. That motion may be null and void because the September 18 minutes (p. 1 last paragraph) stated "There were people who indicated they would have liked to testify and, with the concurrence of the Committee, that opportunity will be extended to them at the next meeting. The Committee agreed." The Committee null and voided the first motion, not in such a direct way, but they did. We can have a second look at this bill, let people testify and decide if this bill should go forward and how that should happen. This is a good piece of legislation, the IPUC are the experts on this; discussion should continue and let this bill come before the State Affairs Committee and get a robust hearing.

Co-chairman Eskridge asked if we looked at renewables and energy efficiency, does this impede policy making, in that the cost of all of these new resources are going to be borne by new customers. Not "new customers" who increase their usage, but customers that are new on the system. For instance, Washington State has got a mandatory renewable portfolio standard which adds a considerable amount to their power supply. A new customer under this theory could very well be taking on that additional burden, could they not. **Mr. Lobb** states this could be taken to the extreme, the legislation allows the IPUC to weigh the ramifications of the change they might put in place. If a new customer was required to pay 100% of the cost of a new resource and pay the rate that is averaged as part of cost of resources that serves everyone else, that wouldn't be fair. It would have to be determined how much more that new resource cost and how much that customer is going to pay and establish some kind of difference. **Commissioner Kempton** discussed rate differentials at the last meeting. **Co-chairman Eskridge** remarked that in this case it would be left up to the discretion of the IPUC. **Mr. Lobb** agreed. This is similar to low income studies where the IPUC may make a determination on rate design and structure and it would not be considered discriminatory.

Representative Anderson followed along that line of thinking, if there is a subdivision with an upper end and lower income housing in the same project; both those classes of people will have to be treated the same. The increase would go to the low income, as well as the upper end homes. If

there is a member in one subdivision who sells their home and buys one in the new subdivision, that person will not be a new customer because they are already a customer and there will be a whole different class structure within the same rate class. That is "Pandora's box. Does the IPUC really want this?" **Mr. Lobb** represents the IPUC staff and they are concerned, like others, about the fast growth in some of the utilities and in the residential sector and the impact on existing customers. Idaho Power has some very large commercial customers and one of the attractions for economic development in southern Idaho is the very low imbedded average rates. The more developers there are, the less cost resource there is to go around, so eventually everyone pays the market price or the going rate. What this legislation does is to allow the IPUC to consider options that they otherwise would not have.

Senator Kelly asked how other states handle this. **Mr. Lobb** said he did not know the answer to that. Growth is a problem in many states and they look at fees. It depends on what the statutes allow. There are hook-up fees, impact fees, and it is not unusual to charge these fees.

Representative Nonini inquired if there was a case/situation where, through new growth, a utility might have to upgrade their services and/or efficiencies to meet the new demand and, if this legislation were in place, those new customers would be charged more, but the older customer would benefit because of the new upgrade and added efficiency. **Mr. Lobb** responded that any scenario is possible. It depends on what fee is in place and what it is designed to cover. There are situations where development to serve new customers creates benefits for existing customers and that often happens. That all has to be weighed when determining who pays.

Representative Jaquet commented that formulas are used when new resources are put in place. If a developer puts a park in a new subdivision but people outside that subdivision use it, the cost allocated to those in the subdivision is derived by a formula. That is why partially it is used; it is not 100%.

Representative Stevenson pointed out that the word "may" is used – the IPUC doesn't have to do it, but they can.

Representative Anderson stated that this is the first time that new and old customers are being treated differently. We are talking about our children who will be buying those homes, not some big growth area somewhere. Our kids could be considered a "new customer" and to give the IPUC the right to do this seems very odd.

Representative Jaquet talked about her grandmother who lives in the downtown area of a very old community who really shouldn't have to pay for development taking place in the growth areas. We should remember both sides.

Representative Stevenson moved to send draft legislation amending *Section 61-315* to the germane committee and let the Speaker decide where it should go. Representative Bell seconded the motion.

Senator McKenzie stated that this is an issue in his district, and he would like to see that the germane committee looks at this and considers both sides of this issue.

Co-chairman Eskridge agrees with **Representative Anderson** that this is pretty drastic departure from normal rate setting that has ramifications and causes concern with inhibiting growth and the impact on those not being considered.

The motion carried by unanimous voice vote and will be sent with the Committee's recommendation to the germane committee, whoever the Speaker decides that may be.

Roy Eiguren, Lawyer and Lobbyist Representing Exergy Development Corporation (XRG) –Amend the Income Tax Law to Allow Investment Tax Credits for Renewable Energy Projects to be transferred

Mr. Eiguren brought a draft of legislation before the Committee for discussion, even though it has not been broadly vetted with interested parties, with the intent to introduce this legislation at the next session of the Legislature. This bill would allow the existing Investment Tax Credit in the Income Tax Act of Idaho to be made available to the owner of a renewable energy project to be transferred and sold. This approach to the transfer of the credit is identical to the current Idaho Broadband Investment Tax Credit, which may be transferred and sold from the owner of the broadband equipment to another party. There is a fairly robust market for those tax credits.

Currently, under federal law, renewable energy projects are subject to an accelerated depreciation schedule for a project. Under existing Idaho law, it is a straight-line depreciation that is locked in. The depreciation for the project goes out to 17-18 years on a 20-year project life which means the tax credit has no benefit to the owner of the project because they can't use the investment tax credit. The Idaho Tax Commission (ITC) doesn't take a position on the policy merits of this, but they say it is something that would work according to existing ITC procedures. In drafting this legislation, language was parroted from recent tax legislation dealing with renewable energy projects, specifically a sales tax exemption for the acquisition of material and equipment for renewable energy projects and the definition of renewable energy projects.

Senator Jorgenson asked for an explanation of an immediate, demonstrable result this might have. **Mr. Eiguren** said that a number of projects that are potentially available to be built need an additional amount of capital to meet the threshold and go forward with construction. This incremental difference would come about by virtue of the sale of the investment tax credit and could generate the amount of the capital necessary for these projects to move forward. **Senator Jorgenson** inquired if there were limitations as to who could acquire these tax credits. **Mr. Eiguren** replied that there are none. This is effective for a brief two-year period, to see what the results would be and then, if warranted, come back to the Legislature for renewal.

James Carkulis, President, XRG, explained that over the last few years, there has been a large increase in installation costs for renewable projects, 40 % since 2005. That increase is also demonstrated in hook-up fees with Idaho Power and their fees for transmission. It is a matter of

economics, due to depreciation schedules and the fact that they do incur a certain amount of debt and there is a 20-year depreciative schedule. This is a way to utilize the tax credit and right now they can't. With this added impetus, it helps at the initial stages to add some value to the projects by adding monetary value to offset installation costs that are presently before them.

Representative Jaquet remarked that there was no fiscal impact. "Are you just trying to figure that out?" **Mr. Eiguren** replied that there is no fiscal impact, based upon discussions with the ITC. Under *Joint Rule 18*, the fiscal impact occurred with the first-time investment tax credit, so that has already been calculated; as a consequence, this legislation will not have any additional fiscal impact. **Co-chairman Eskridge** asked if there would be a timing impact as to when the tax credit could be applied and it is received, asking if it would have a timing impact on state revenue. **Mr. Eiguren** stated that the credits could be transferred during the two-year period. There would be some application of those credits over the life of the credit which goes out 20 years. There would be impacts over time, but those impacts have already been calculated pursuant to the fiscal note associated with the original investment tax credit.

Representative Jaquet remarked that other bills were either not passed (didn't pass on the floor) or were changed when they were initially going to have a transfer component and the tax committee did not agree. "Where are you in your conversations with the tax committee because it brings the same issue up again?" **Mr. Eiguren** responded that this is different. 1)This is an existing tax credit, making it transferrable for a very narrowly limited class of projects that are already subject to the investment tax credit. 2)There have not been discussions with the tax committee; he said that there are discussions taking place, first with this committee in order to begin the process, and the general discussion, not only with the Legislature, but with interested parties. **Representative Jaquet** acknowledged that this is broader than the wind project and there is a two-year window; she said that it seems that XRG may have a "jump" on this, asking if others who are trying to develop renewable projects would have the same playing field within the 2-year time frame. **Mr. Eiguren** shared a strong feeling that this should be applicable to all forms of renewable energy; that is already established in policy, due to recent legislation, and that is the spirit of the entire industry.

Senator Werk remembered that there was a renewable tax credit for alternative energy that included transferability that was vetoed by **Governor Kempthorne,** asking what the reason was for that veto. **Mr. Nugent** answered by saying that a bill with an investment tax credit and a kwh tax credit passed both houses unanimously and got vetoed. **Mr. Whitlock** was Chief of Staff and came before the committee, explaining that it was a victim of bad timing. The bill did pass in 2004 or 2005. **Co-chairman Eskridge** commented that the bill was a victim of circumstances. **Senator Werk** stated that as he understands this draft, the two are not related. This question was not to cloud the issue, just information that another bill was vetoed relating to this subject.

Mr. Eiguren stressed that this is not an additional investment tax credit; that already exists as a matter of law. This is simply taking the existing investment tax credit that is already available for a wide range of capital investment, carves out the renewable energy projects, and says those credits are transferrable for a limited period of time.

Senator Kelly said this only applies to 25 kwh or larger, asking if that is because the investment tax credit has the same restriction. **Mr. Eiguren** said "No, this came from the sales tax exemption since it was already established policy". **Senator Kelly** added that there is no reason to have that benefit for large scale versus small scale. **Mr. Eiguren** had no objection to change that. **Senator Kelly** requested a brief description of what would happen if this passed or if it failed. **Mr. Eiguren** answered that if it passes, it will allow state investment tax credits available to this type of project to be transferred and sold to taxpayers. If it doesn't pass, the tax credit is not transferrable and is not available to be monetized. **Senator Kelly** specifically asked if there was a proposed project that depended on a transfer of the credits to go forward or not. **Mr. Eiguren** didn't know the general answer, but said that XRG has a number of projects that would benefit by this.

Mr. Carkulis responded from XRG's perspective, saying that the allowance of the tax credit at the current value of 65% allows extra funds which would mitigate some of the increased costs incurred over the last three years. The move right now is to begin construction in 2009 with around 220 mw of generation projects.

Co-chairman Eskridge asked at what time is the tax credit sold, before the project was complete or after it came on line and what are the guarantees that the project will be operational. **Mr. Eiguren** stated that there was no guarantee that it would be operational but, under existing law, the tax credit is not available until the installation is complete and operational. He said that there is no way the tax credit can be transferred unless the project is up and operational. There is also a requirement in the legislation that the owner of the renewable project obtain a certificate that the project meets the definition of a renewable energy project.

Chairman Eskridge referred back to the energy plan which promoted the development of renewables, asking does this help encourage the development of renewables. **Mr. Eiguren** said this would implement that.

Representative Jaquet wanted confirmation about where the certificate would come from. **Mr. Eiguren** listed Idaho Power or another utility, or a cooperative, or a municipality, or the IPUC. **Representative Jaquet** asked what was currently in code if they default. **Mr. Eiguren** responded that if, somewhere along the life of the project it is no longer operational, then the tax credit is not going to be applied and there would be a process of recapture; that is covered in statute in *Section 63-3029*.

Representative Stevenson asked if the federal tax credit is transferable. **Mr. Carkulis** stated that the Federal Production Tax Credit is not an Investment Tax Credit, it is a production credit and has much different requirements.

Co-chairman Eskridge asked what **Mr. Eiguren** was looking for from the Committee. **Mr. Eiguren** brought this draft bill to the Committee for review and preferably would like the Committee to take action to support the bill so it would move forward.

Co-chairman Eskridge reminded the Committee (asking for correction, if wrong) that there is no risk to the state in terms of tax credits and is a tax benefit in encouraging the development of renewable resources which is one of the purposes that the Committee outlined and one of the recommendations in the Energy Plan. He said that it keeps us moving in the direction of voluntary incentified renewable resources, as opposed to going the other direction for mandatory resource development.

Senator Jorgenson moved that this Interim Committee vote to endorse this proposal and send the bill on to the germane committee, seconded by Representative Nonini.

Senator Werk said that he needed more time to study and understand the impacts and was concerned by the limited time frame, which could provide a competitive advantage for one or two companies while not really giving the state enough time, in terms of the sunset, to understand the nature of the impact it has. Whenever tax credits and exemptions have been dealt with, the time frame has been thought of as a 5-7 year time period to get real data. He said he was not sure he could support the motion because of lack of information. **Co-chairman Eskridge** personally, not speaking for everyone, has looked at sunset-type provisions so that we are not locked into income tax benefits that we can't get away from. He said he sees the time period as beneficial, asking **Senator Werk** if he would support the motion with a five-year time frame. **Senator Werk** was more comfortable with the five years, saying that the tax committee would be looking at the tax ramifications and any cost to the state. **Co-chairman Eskridge** asked if the drafters had any objection to the five-year time frame. **Mr. Eiguren** stated that this is the first cut, and that he would have no objection to a five or seven-year time frame.

Co-chairman Eskridge asked if, given that, was the Committee comfortable with the motion. He asked if **Senator Werk**, would like an amended motion with a five-year period. **Senator Werk** responded that he would take **Mr. Eiguren** at his word, that there will be changes made and said that he looks forward to seeing those changes; those changes will be communicated to the Committee. **Senator Werk** said he would be comfortable with whatever the Committee wishes to do.

The motion carried by unanimous voice vote.

Paul Kjellander, Idaho Office of Energy Resources on Renewable Energy Enterprise Zones, Update on Residential Building Efficiency Program, and the Office of Energy Resources' view of the state proceeding in parallel with State Energy Plan

Mr. Kjellander addressed the Committee about a mapping project for the potential of wind as a renewable resource and the development of that resource within ten miles of the center point of existing transmissions. (Handout on file at LSO.) Map 1 shows northern Idaho and breaks it down to state, federal, and tribal lands and then shaded in the 10-mile buffer, then indicates the levels of wind potential that exist. He said that doesn't mean there is transmission capacity there, it is the *potential* for transmission capacity. Other areas such as endangered species, BLM lands and roadless areas also must be identified before any priorities are set. This is a first step to identify those potential areas where a developer might choose to locate a project in rural Idaho. Other

interested parties are included in these discussions to get ideas and support. Once this is finished for wind, the same process can be used for geothermal, biomass, and other renewable resources only with different parameters. The maps will probably change as they move forward but this will provide a reality to the mix and a glimmer of what can be possible in developing resources.

Mr. Kjellander distributed a draft of legislation relating to energy enterprise zones within the state of Idaho for the Committee to review (on file at LSO). The key point heard from legislators and the executive branch are tax incentives that will move things forward. It has to be revenue neutral to existing revenue streams, otherwise it would create more havoc to the General Fund and the ability to manage that. There may be some language included related to the transferability of tax credits and to the extent that may be a heavy burden in this piece of legislation. **Mr. Kjellander** said that he had no problem if the Legislature decides it is not the right time or place. There are other incentives, but at this time the Idaho State Tax Commission (ISTC) has not been involved; there are other incentives that are revenue neutral, as far as existing revenue streams, and those are the ones that have the most ability to go forward.

This is an opportunity to lay the framework to create renewable energy enterprise zones going forward by targeting one specific energy resource development that is somewhat unique in the state of Idaho as a pilot project. This would give us an opportunity to see how it works in a very confined location so if there are unintended consequences by some of the incentives, it is in a confined region and won't have a dramatic impact. The incentives are in existing statute; they will be pulled together and applied to the zone. The first zone created would deal with the dairy industry, targeting the Magic Valley area, several county regions. It would be used to promote the development and distribution services for compressed natural gas and pipeline quality natural gas within the area, rewarding electricity up front because it is a different energy resource development. This is an emerging industry, the first in the nation, for Magic Valley to create pipeline quality natural gas. This is an opportunity to make the project stable, to build more digesters, and create the distribution system to a central refining facility.

Some of the issues they are facing today includes a contract that has been signed with Intermountain Gas. The plan would be to compress the natural gas and truck it to the pipeline. That is probably not the most effective system. Looking at the number of cattle and the growing dairy industry, there is an enormous opportunity. This legislation also looks at other partnerships with the counties. The counties would create the zone and take it to the IPUC for review. There is a check and balance perspective built in.

The zone would take the free enterprise element that already exists, take the resource and develop markets for it, push hard to exploit and expand it, and provide the right incentives to get it to a scalable level. Other opportunities would be research and the ability to bring in grant dollars, as well as to partner with the agriculture sector and the USDA, DOE, and INL. This would also allow the investigation of secondary markets.

The hope would be that the counties would look at this as a successful enterprise and they would have a viable natural resource that would qualify for a zone. It is a good framework, the timing is

perfect, and it would be an opportunity to work with this Committee to help work out some of the bugs and provide incentives that will not represent a drain on the state revenue streams.

Senator Kelly asked if there was a fiscal note or is the draft written broadly enough that one is not needed. **Mr. Kjellander** replied that they do not have a fiscal note. This piece of legislation was brought to the Committee for review and comments so that when it came time to put a fiscal note on it, there would be input so that it would be right and would carry through. Hopefully, there will be zero fiscal impact to the General Fund.

Representative Jaquet remarked on the number of times counties were mentioned and wondered if **Mr. Kjellander** was talking about property tax. **Mr. Kjellander** said that would be up to the county to determine what type of incentives or opportunities they would want to bring to the table. When they bring this to the IPUC to ask for the designation, the county will have to bring some things to the table as well. **Representative Jaquet** said there are some transmission plans drawn from the dairies to a central point, asking if he had seen a cost estimate on that. **Mr. Kjellander** responded that he had seen several cost estimates, but he didn't have that information with him and was unsure how the pricing and parameters were based for that adventure. That is something that needs to be explored. **Representative Jaquet** asked if the IPUC would offer some kind of technical help to the counties. **Mr. Kjellander** answered that he didn't see that as the role of the IPUC. He said that one of the things being looked at through the Governor's Energy Alliance is bio gas; they have relied heavily on the Sportsman Center for Advanced Energy Studies for data, and that is an opportunity to bring expertise to the table.

Representative Jaquet asked if the end product from the dairies is of high value and if there is going to be more research on the concept. **Mr. Kjellander** said that has been done and what they have now is ready for the pipeline. This project is not going to reduce our dependency on natural gas; that is not going to happen. However, if that resource is developed for the purpose of providing more opportunities for growth and development without expanding the transport system to use within the area, that is very possible. This opens up opportunities that don't exist today by being creative within reasonable boundaries where risk can be reduced; this legislation can reduce the risk by targeting a specific zone, moving forward, and seeing what works.

Co-chairman Eskridge asked what was expected from this Committee today. **Mr. Kjellander** stated that advancing the cooperation they have now and getting input on the things you would like to see, to find something the Committee might endorse. The hope was to give the Committee a better understanding and opportunity to look at the language for fiscal responsibility to figure out which incentives could be used that will not have an impact on existing General funds and revenue streams, but incentives that make sense to the industry as well. **Co-chairman Eskridge** reiterated that this is a proposal for renewable energy enterprise zones that probably wouldn't happen without some incentives; the Committee needs to look at what it thinks would work. 1) Are zones what we want to pursue. 2) How do we make it happen. **Mr. Kjellander** concurred.

Senator Jorgenson complimented **Mr Kjellander** for bringing in some creative ideas. He said that Idaho is in a tenuous situation where sister states are competing for these very things and Idaho has to step it up or will be left behind.

Senator Lodge drew attention to the statement in the draft legislation that said the enterprise zone pilot shall be located within counties that contain or are within 40 miles of a navigable river. **Mr. Kjellander** explained it is taken to target it to the Magic Valley; the navigable river might be the Snake River. **Senator Lodge** was concerned about how navigable the river has to be or how far it has to go. **Mr. Nugent** interjected that this was a way to get away from using a list of counties by using "navigable river" and "cows." **Senator Lodge** said this also would pertain to Owyhee County and Canyon County because they have the river and the cows. That language doesn't just take in Magic Valley. **Mr. Kjellander** posed that was something to decide to leave in or take out, that being a legislative call. There is only one area in the state that has the nucleus, and that is Magic Valley.

Representative Stevenson stated that before the pilot program can take place, the commissioners would have to make the request. **Mr. Kjellander** replied that there is the opportunity for the IPUC to establish some of the rules of what they will consider as these zones are created. They will likely differ a little from one type of resource to another and there will be an opportunity for the other players to get involved in that. Also, the "5000 head of cattle" needs to be clarified. There are many things in this legislation to get out for discussion.

Co-chairman Eskridge concluded that all members of the Committee will review this draft and provide input and suggestions. **Mr. Kjellander** requested permission to give the ISTC a copy for review as well. **Chairman Eskridge** agreed.

Senator Kelly said it would also be helpful to know what federal incentives are out there. **Co-chairman Eskridge** responded that there are not a lot of federal incentives that would be applicable or parallel for this type of project.

Senator Werk asked for a one-minute synopsis on the 25 x 25 task forces out there and if other legislation is coming from them. **Mr. Kjellander** reported that the task forces have all been working on developing models on how to move projects forward, looking at scalability and identifying barriers. He said that three new task forces were just established: 1)Communications, 2)Transmission, and 3)Solar.

Mr. Kjellander said that solar is not economical now because of rates, but it may be possible to attract the manufacturing of solar panels. Transmission is taking on a significant piece of the load. Projects are moving right now so we cannot sit back. We will be dealing with transmission issues in the near term and the processes need to be streamlined to meet the demand. There will be much capital expended for transmission, and the cost of capital is critical. The objective is to look for ways to creatively deal with that issue which Wall Street views as a regulatory risk, so we should see a piece of legislation show up. Will everybody love it? No! This is a capital intensive period and that is not what we want. The need is to have a stable rate structure. We need to do the kinds of things that say we are open as a state for business, but we are also keeping a close eye on moving forward and letting the customers foot the bill.

Representative Jaquet asked if we are we going to hear about the residential building efficiency program. **Mr. Kjellander** said we needed to look at this again because revenue streams changed. There was a section of statute that related to residential energy efficiency and some of the tax breaks in existence haven't been updated since 1978. Since then, we have slipped into a recessionary period. The numbers have been rerun, including some sales tax scenarios, and it is now at DFM; they haven't heard back yet whether or not they concur with the outcome. It depends on the fiscal note whether or not it really does represent a revenue-neutral scenario; if it doesn't, even if it really needs to happen, this may not be the right time.

Mr. Nugent said the Energy Plan came up at the last meeting. The plan book was available for whoever wanted one to review; it may be useful to the Committee members.

Representative Bell stated that she was not comfortable discussing the plan because she hasn't had a chance to review it recently. Unless there were specific areas to take action on and update, she didn't feel ready to discuss. The update would include legislation the Committee might construct.

Senator Werk recalled the discussion was to look at the recommendations in the plan and focus on where we are, what are we working on, and what are we talking about; the plan provides a road map for the Committee. A summary of those recommendations in the plan may be easier to deal with. **Mr. Nugent** said there is a ten-page executive summary in the plan book.

Co-chairman Eskridge suggested that one way to deal with this was to connect the annual report with the recommendations of the energy plan and try to coordinate the report with what has been done as a committee for the last year, in terms of following the energy plan.

Co-chairman McKenzie stated that various pieces of legislation have come out of the energy plan, so the Committee should tie the energy legislation to the energy plan. He said that the Committee has had some effect on the energy office reform and been recognized as one of the most proactive states in the country because we adopted a plan. A report listing those issues might be useful. There has been wind energy and promotions of alternative fuels etc.

Representative Anderson added that **Mr. Kjellander** has taken direction from this Committee to implement the plan, he is listening very well, and trying to see this through.

Co-chairman Eskridge asked the Committee's indulgence and, taking into account at what has been looked at, will try to gear the annual report in conjunction with a comparison of how this Committee, as well as other legislative activities performed, followed the direction of the energy plan. Hearing no objections, **Mr. Nugent** will compile the report.

Senator Werk - Energy Efficient School Buildings.

Senator Werk reminded the Committee that last meeting there was discussion about the alteration of last year's bill on energy efficient schools. Last year we were requiring schools to use fundamental conditioning and integrated design and paying for that through the bond levy equalization program. People objected to the plan to require school districts to do that, so it was converted to an incentive-based program. There is still the desire that school districts will build

better buildings. The idea behind the legislation was to provide an incentive program to get the schools to use integrated design and fundamental conditioning to build better, higher-performance buildings without adding any energy efficiency technologies that may cost extra money. Using these methods, literature shows that there is a 20% increase in energy efficiency. Integrated design doesn't cost anything, but requires planning; fundamental conditioning does cost money. This is not a requirement, it is optional. The handout (on file at LSO) provides information about the maintenance match for each school district.

The idea of the incentive is to use the maintenance match that the school districts are supposed to provide to take care of maintenance on the buildings; 2% of the value of the buildings is to be set aside each year in an account for maintenance as provided by Idaho Code. The tables show how much each school district gets as a match from the state. The more money the school district has, the less state match it receives. The state matching comes from lottery funds and general funds. The schools get most of their funds from the state, so costs they are ultimately paid by the state. If there is a bad building, the state pays for it and continues to do so for the life of the building.

The incentive is to forgive the school districts's portion of the maintenance match; the state would still pay into the fund for the district. The incentive would be 100% the first year, 80% the second year, 60% the fourth year, and so on up to five years. These freed up funds would be available for the school district to spend for any purpose they see fit. The incentive provides a lot of freedom for the school district for other priorities they might have like teachers salaries, books, computers, etc. Even the school district receiving the least amount would still see a benefit. Every school district, when they built a new building no matter how the maintenance match goes, would see an advantage from this incentive. They would bring more money in during the five-year period than they would have spent to get the fundamental conditioning piece. This doesn't take into account how much is saved on energy over the five-year life of the incentive at the 20% level. Each Committee member can look at their own districts and see what the incentive would look like. Jason Hancock, State Department of Education put together the data for this report.

Co-chairman Eskridge looked at Avery School District which showed a $328,000 benefit with a cost of $60,000 for fundamental conditioning; integrated design has no cost associated with it. **Senator Werk** pointed out the .85% of the construction cost of the new building would be the benefit. **Co-chairman Eskridge** liked the idea of covering the costs, but may not like the idea of freeing up additional money from maintenance that might cause a backlog; there may be some way to work that out. **Senator Werk** suggested a sliding scale could be created so the benefit might not be as high and it wouldn't take any benefit from the lowest school district that gets the least benefit. This is a way of providing an incentive without spending any additional state funds. This frees up money the school district ties up for the maintenance fund.

Representative Jaquet commented that the districts hate having to put that money into the maintenance fund; here we are altering a fund they don't like. **Senator Werk** stated that right now every district is required to set aside this money for maintenance. What this does is tell the districts that if they build a new building using fundamental conditioning and integrated design resulting in a higher performance building and saving state money in the long run, we will allow them to **not** put that money in that fund. That money can be used for whatever they deem necessary for their

district. The districts should be happy because they are being freed from making that maintenance match payment. **Representative Jaquet** said they didn't want any strings attached to that money. What did they say when you went to the meeting in Coeur d'Alene? **Senator Werk** said his impression from every school district he has spoken with is that they would see this as a way of freeing up some additional funds that they could use for other purposes.

Representative Bell asked **Representative Nonini** if those who keep up their buildings and do a good job have a great deal of aggravation about having to put that money away. Is your Committee in any way looking at that issue to adjust it before we enter into something you may be doing with your school budget this year. **Representative Nonini** stated that they have not had that discussion at this point.

Representative Stevenson inquired about a school district that is not going to be building a new building and their buildings are in good repair; how do they get classified. **Senator Werk** reiterated that if a school district builds a new school building, that it is made into a high-performance building. If we are concerned about existing buildings, there is a performance contract in statute that allows school districts to upgrade older facilities.

Representative Nonini wanted to know what happens if a school district built a regular building; what would be the additional cost as a percent to upgrade that building. **Senator Werk** replied that studies show quite conclusively that use of integrated design, which helps to adequately plan the building and make it perform better, doesn't cost anything; it is just a different process by accessing resources at the right time. Fundamental conditioning is having a third party oversee the planning specification, installation and fine tuning of all the mechanical systems that go into a school. This doesn't add anything exotic. The cost is .85% of the cost of the building.

Representative Nonini asked **Senator Jorgenson** what was the cost of that school they built. They did some efficiencies in that building. **Senator Jorgenson** replied that educators are not building these buildings, they are going to architects who are designing and adding in the latest technology. He said there was considerable savings and essentially complied with all the goals of energy efficient buildings, that being part of the bid. **Senator Jorgenson** is all for making schools more efficient, but there are some assumptions being drawn and some generalizations that have to be spelled out. The assumption that a new building is built to old standards or codes is a generalization. All new buildings are built to the latest technology. The notion of integrated planing is redundancy. The expressed goals are great, but we need to get people to testify about some of these issues.

Co-chairman Eskridge questioned redundancy, since integrated design is having the heating and air conditioning person work with the window person to ensue that all systems within the building are working efficiently together. **Senator Jorgenson** referred to this issue only in the sense as to how it is laid out in the bill, not in actuality.

Senator Werk pointed out that all schools that are constructed have to meet building codes. Even if school buildings are designed to code doesn't mean that they ever get anywhere near that. There have been many examples throughout the state of buildings that met all the code requirements, were

reviewed by building safety when they were built, and still needed millions of dollars in repairs before they could open their doors. What **Senator Jorgenson** said is absolutely true. There are some school districts that hire the right kinds of architects that do the right kinds of things. Boise and Meridian have access to the expertise to build good buildings, but the Jefferson Counties of the world don't have that expertise in their district and, in the process, get less than satisfactory results. The school district does not have to take advantage of this if they choose not to. They are free to build a building any way they want to.

Representative Anderson admitted to being in denial about integrated design, saying that he has studied this extensively. He can build a home, using the most efficient technology available, but with regard to commissioning and integrated plans, working with architects and builders to understand elements that are above efficiency products, he hasn't the education to know all factors. He said there are ways to build a home that meet standards that are far above what any code requirement is, by using the conditioning process. Integrated design makes a tremendous difference in the efficiency of the building.

Representative Jorgenson said the only troubling thing about this discussion is the use of generalizations. When we compare homes to public structures, there is a vast difference. He said he'd like to be more supportive but doesn't like generalization and there are a lot of generalizations being made; public policy cannot operate from generalizations.

Representative Anderson said he has never built a public building, but it is a matter of scale in many respects. There are buildings built to that commission standard and some savings could not be attained without the commissioning process. The only experience he has is with homes and he didn't mean to imply he has built public buildings.

Representative Smith asked if this would apply to an addition to an existing building that would double the size of the building. **Senator Werk** answered "No, it would not include a renovation or addition to a building although the performance contracting statute would allow school districts to take advantage of the performance contract if they wanted to make the former portion of the school meet the efficiency requirements of the new portion."

Representative Nonini asked how the 5 years was arrived at, as opposed to 7 or 10 years. **Senator Werk** said it made sense to "rachet" it down in 20% increments from 100% the first year so five years seemed to work out. This gives the school district the opportunity to ease back into the full load of the maintenance match.

Senator Jorgenson stated that there is still a question. These incentives represent costs and how these costs are going to be paid for. There is an assumption that there must be integrated planning in order to get efficiencies. There will be efficiencies if anyone does a new building and uses proper architecture.

Co-chairman Eskridge reminded the Committee that this incentive concept does not require anyone to do it; any school district can look into integrated design and conditioning. If they are in a position to save taxpayer money, that is a good thing; they have the prerogative not to. This bill

could be an opportunity, not a mandate or requirement, but rather an incentive. He assumed the Committee was not taking any action at this point. **Senator Werk** agreed this was information that was in answer to a question raised last meeting.

Co-chairman Eskridge thanked the Committee and the meeting was adjourned at 4:35 p.m.